

## **PUBLICATIONS**

### ***Patent(s)***

- [1] USA Provisional Patent – “A novel Process for Production of Sulfonated and Sulfated Surfactants in Supercritical Medium,” **Lohi/Silveston/Hudgins**, US#60/578320, 2006.

### ***Chapters in Books***

- [2] Silveston P. L., Panthaky M. A., Duval K., Vladea R. V., **Lohi A.**, Hudgins R. R., 2001, “Low-temperature, Carbon-catalyzed, Solvent-washed, Trickle-Bed Sulfuric Acid Process,” in Reaction Kinetics and the Development and Operation of Catalytic Processes edited by G. F. Froment and K. C. Waugh, Elsevier, ISBN 0444505598, 978-0444505590,195-203.
- [3] Doan H., Upreti S. R., **Lohi A.**, 2005, “Gas-to-Liquid Mass Transfer” in Encyclopaedia of Chemical Processing, Marcel Dekker, New York, ISBN 0824755634, 978-0824755638,1163-1174.
- [4] Zahedi G., Elkamel A., **Lohi A.**, Jahanmiri A., Rahimpour M. R., 2006, “Hybrid Model Formulation for the Unsteady State Simulation of a Packed Bed Reactor for CO<sub>2</sub> Hydrogenation to Methanol” in Computational Methods, edited by G.R. LIU, V.B.C. Tan and X. Han, Springer, ISBN:1-4020-3952-2, 978-1402039522,143-147.
- [5] Imran M., Upreti S.R., **Lohi A.**, 2008, “Optimal Oil Production from Vapex: Potential Directions” Chapter 3 in Petroleum Science Research Progress, editor: K.L. Montclair, Nova Science Publishers, Inc., ISBN: 978-1-60456-012-1, 21-27.

### ***Refereed Journal Papers***

- [6] Imran M., Upreti S. R., **Lohi A.**, 2010, “Dispersion of Butane in Vapex: The Effect of Drainage Height,” The Open Petroleum Engineering Journal, **3**, 14-21.
- [7] Abukhalifeh H., Upreti, S. R., **Lohi A.**, 2010, “Permeability Effect on the Concentration-Dependent Propane Dispersion Coefficient in Vapex,” International Journal of Oil, Gas and Coal Technology, in press.
- [8] Wongrat W., Younes A. Elkamel A., Douglas P. L., **Lohi A.**, 2010, “Control Vector Optimization and Genetic Algorithms for Mixed-Integer Dynamic Optimization in the Synthesis of Rice Drying Processes,” Journal of the Franklin Institute, in press.
- [9] Biglari M., Ilkhani S., Alhajri I, **Lohi A.**, 2010, “Process Design, Simulation, and Integration of a New Desalter in the Crude Distillation Unit of a Refinery,” International Journal of Oil, Gas and Coal Technology, in press.
- [10] Muhamad H., Doan H., **Lohi A.**, 2010, “Batch and Continuous Fixed-Bed Column Biosorption of Cd<sup>2+</sup> and Cu<sup>2+</sup>,” Chemical Engineering Journal, **158**, no. 3, 369-377.
- [11] Akbarzadeh V., **Lohi A.**, Chan P. K., Upreti S. R., 2010, “Behavior of Nematic Bipolar Droplet in PDLC Films: An Optimization Study,” Macromolecular Theory and Simulations, **19**, no. 2-3, 81-87.
- [12] Al-Ali H. H., Saif Y., Elkamel A., **Lohi A.**, 2010, “Integrating Renewable and Nonrenewable Energies in Power Plant Planning,” American Journal of Engineering and Applied Sciences, **3**, no. 2, 333-341.
- [13] Wongrat W., Younes A. Elkamel A., Douglas P. L., **Lohi A.**, 2010, “Generalized Disjunctive Programming for Synthesis of Rice Drying Processes,” Industrial and Engineering Chemistry Research, **49**, no. 5, 2312-2325.
- [14] Wan L., Cuenca M., Upreti S. R., **Lohi A.**, 2010, “Development of a Three-Phase Fluidized Bed Reactor with Enhanced Oxygen Transfer,” Chemical Engineering and Processing: Process Intensification, **49**, no. 1, 2-8

- [15] Zahedi G., Elkamel A., **Lohi A.**, 2010, "Genetic Algorithm Optimization of Supercritical Fluid Extraction of Nimbin from Neem Seeds," *Journal of Food Engineering*, **97**, no. 2, 127-134.
- [16] Abukhalifeh H., **Lohi A.**, Upreti S. R., 2009, "A Novel Technique to Determine Concentration-Dependent Solvent Dispersion in Vapex," *Energies*, **2**, no. 4, 851-872.
- [17] Zahedi G., **Lohi A.**, Karami Z. 2009, "A Neural Network Approach for Identification and Modeling of Delayed Coking Plant," *International Journal of Chemical Reactor Engineering*, **7**, A16 (<http://www.bepress.com/ijcre/vol7/A16>).
- [18] Elkamel A., Zahedi G. R., Marton C., **Lohi A.**, 2009, "Optimal Fixed Bed Reactor Network Configuration for the Efficient Recycling of CO<sub>2</sub> into Methanol," *Energies*, **2**, no. 2, 180-189.
- [19] El-Haj R., **Lohi A.**, Upreti S. R., 2009, "Experimental Determination of Butane Dispersion in Vapor Extraction of Heavy Oil and Bitumen," *Journal of Petroleum Science and Engineering*, **67**, no. 1-2, 41-47.
- [20] Doan H. D., **Lohi A.**, 2009, "Intermittent Aeration in Biological Treatment of Wastewater," *American Journal of Engineering and Applied Sciences*, **2**, no. 2, 260-267.
- [21] Tendulkar J., Upreti S.R., **Lohi A.**, 2009, "Experimental Determination of Concentration-Dependent Carbon Dioxide Diffusivity in LDPE," *Journal of Applied Polymer Science*, **111**, no. 1, 380-387.
- [22] Zahedi G. R., **Lohi A.**, 2009, "Heterogeneous Dynamic Modeling and Simulation of an Industrial Ethylene Oxide Reactor Experiencing Catalyst Deactivation," *Journal of Chemistry and Chemical Engineering*, **3**, no. 1, 18-26.
- [23] Dang V. B. H., Doan H. D., Dang-Vu T., **Lohi A.**, 2009, "Equilibrium and Kinetics of Biosorption of Cadmium(II) and Copper(II) Ions by Wheat Straw," *Bioresource Technology*, **100**, no. 1, 211-219.
- [24] Al-Ali H. H., Saif Y., Elkamel A., **Lohi A.**, 2008, "Optimal Production Planning of Electricity from Coal-Fired Power Plant Networks under Environmental Considerations," *American Journal of Engineering and Applied Sciences*, **1**, no. 4, 358-367.
- [25] Doan H. D., **Lohi A.**, Dang V. B. H., Dang-Vu T., 2008, "Removal of Zn<sup>+2</sup> and Ni<sup>+2</sup> by Adsorption in a Fixed Bed of Wheat Straw," *Process Safety and Environmental Protection*, **86**, no. 4, 259-267.
- [26] Mahdi K., Gheshlaghi R., Zahedi G., **Lohi A.**, 2008, "Characterization and Modeling of a Crude Oil Desalting Plant by a Statistically Designed Approach," *Journal of Petroleum Science and Engineering*, **61**, no. 2-4, 116-123.
- [27] Hanna J, Upreti S.R., **Lohi A.**, Ein-Mozaffari F., 2008, "Constrained Minimum Variance Control Using Hybrid Genetic Algorithm-An Industrial Experience," *Journal of Process Control*, **18**, no. 1, 36-44.
- [28] **Lohi A.**, Alvarez-Cuenca M., Anania G., Upreti S.R., Wan L., 2008, "Biodegradation of Diesel Fuel Contaminated Wastewater Using a Three-Phase Fluidized Bed Reactor," *Journal of Hazardous Materials*, **154**, no. 1-3, 105-111.
- [29] Elkamel A., Fatehifar E., Taheri M., Al-Rashid M.S., **Lohi A.**, 2008, "A Heuristic Optimization Approach for Air Quality Monitoring Network Design with the Simultaneous Consideration of Multiple Pollutants," *Journal of Environmental Management*, **88**, no. 3, 507-516.
- [30] Zahedi G. R., Elkamel A., **Lohi A.**, 2007, "Enhancing CO<sub>2</sub> Conversion to Methanol Using dynamic Optimization Applied on Shell Temperature and Inlet Hydrogen During 4 Years Operation of Methanol Plant," *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, **29**, no. 15, 1385-1396.
- [31] Zahedi G. R., Elkamel A., **Lohi A.**, 2007, "Dynamic Optimization Strategies of a Heterogeneous Reactor for CO<sub>2</sub> Conversion to Methanol," *Energy and Fuels*, **21**, no. 5, 2977-2983.
- [32] Upreti S. R., **Lohi A.**, Kapadia R., El-Haj R., 2007, "Vapor Extraction of Heavy Oil and Bitumen: A Review," *Energy and Fuels*, **21**, no. 3, 1562-1574.

- [33] Dang-Vu, T., Doan H. D., **Lohi A.**, Zhu Y., 2006, "A New Liquid Distribution Factor and Local Mass Transfer Coefficient in a Random Packed Bed," *The Chemical Engineering Journal*, **123**, no. 3, 81-91.
- [34] Sundaram B. S., Upreti S. R., **Lohi A.**, 2006, "Optimal Policies for BMA Polymerization in Non-Isothermal Batch Reactor," *Journal of Applied Polymer Science*, **102**, no. 3, 2799-2809.
- [35] Alvarez-Cuenca M., Vezuli J., **Lohi A.**, Upreti S. R., 2006, "Anaerobic Biodegradation of Diesel Fuel-Contaminated Wastewater in a Fluidized Bed Reactor," *Bioprocess and Biosystems Engineering*, **29**, no.1, 29-37.
- [36] Zahedi G. R., Jahanmiri A., Elkamel A., **Lohi A.**, 2006, "Mathematical Modeling, Simulation, and Experimental Verification of CO<sub>2</sub> Removal in a Turbulent Contact Absorber," *Chemical Engineering Technology*, **29**, no. 8, 916-922.
- [37] Kapadia R., Upreti S. R., **Lohi A.**, Chatzis I., 2006, "Determination of Gas Dispersion in Vapor Extraction of Heavy Oil and Bitumen," *Journal of Petroleum Science and Engineering*, **51**, no. 3-4, 214-222.
- [38] Dang-Vu T., Doan H. D., **Lohi A.**, 2006, "Local Mass Transfer in A Packed Bed: Experiments and Model," *Ind. & Eng. Chem. Res.*, **45**, no. 3, 1097-1104.
- [39] Zahedi G. A., Elkamel A., **Lohi A.**, Jahanmiri A., Rahimpour M. R., 2005, "Hybrid Artificial Neural Network – First Principle Model Formulation for the Unsteady State Simulation and Analysis of a Packed Bed Reactor for CO<sub>2</sub> Hydrogenation to Methanol," *Chemical Engineering Journal*, **115**, no. 1-2, 113-120.
- [40] Upreti S. R., Sundaram B. S., **Lohi A.**, 2005, "Optimal Control Determination of MMA Polymerization in Nonisothermal Batch Reactor Using Bifunctional Initiator", *European Polymer Journal*, **41**, no. 12, 2893-2908.
- [41] Sundaram B. S., Upreti S. R., **Lohi A.**, 2005, "Optimal Control of Batch MMA Polymerization with Specified Time, Monomer Conversion, and Average Polymer Molecular Weights", *Macromolecular Theory and Simulations*, **14**, no. 6, 374-386.
- [42] Wattanakasemtham N., Croiset E., Hudgins R. R., Silveston P. L., **Lohi A.**, 2005 "Oxidation of SO<sub>2</sub> and Recovery of SO<sub>3</sub> Using Non-Aqueous Solvents," *Ind. & Eng. Chem. Res.*, **44**, no. 16, 5950-5954.
- [43] Zhu Y., Doan H. D., **Lohi A.**, 2005, "Relation of Liquid Distribution and Local Mass Transfer Coefficient in A Packed Bed," proceedings of The 7<sup>th</sup>World Congress of Chemical Engineering, July 10-14, 2005, Glasgow, Scotland.
- [44] Yao F., **Lohi A.**, Upreti S. R., Dhib R., 2004, "Modeling, Simulation and Optimal Control of Ethylene Polymerization in Non-Isothermal, High-Pressure Tubular Reactors," *International Journal of Chemical Reactor Engineering*, **2**, A16, 1152, (<http://www.bepress.com/ijcre/vol2/A16>).
- [45] Gostick J., Pritzker M. D., **Lohi A.**, Doan H. D., 2004, "Mass Transfer Variation within a Packed Bed and Its Relation to Liquid Distribution," *The Chem. Eng. Journal*, **100**, 33-41.
- [46] Gostick J., Doan H. D., **Lohi A.**, Pritzker M. D., 2003, "Investigation of Local Mass Transfer in a Packed Bed Using a Limiting Current Technique," *Ind. & Eng. Chem. Res.*, **42**, no. 15, 3626-3634.
- [47] Won W., **Lohi A.**, Hudgins R. R., Silveston P. L., 2001, "The Solubility of SO<sub>3</sub> and Sulfuric Acid in Ketones", *Canadian Journal of Chemical Engineering*, **79**, no. 2, 287-289.
- [48] Panthaky M. A., Vladea R. V., **Lohi A.**, Hudgins R. R., Silveston P. L., 2001, "Trickle-Bed Scrubbing of Flue Gas SO<sub>2</sub> using Non-Aqueous Solvents," *Canadian Journal of Chemical Engineering*, **79**, no. 5, 765-770.
- [49] **Lohi A.**, Wynnyckyj J.R., Rhodes E., 1992, "Spectral Measurement of the Complex Refractive Index of Fly Ashes of Canadian Lignite and Sub-bituminous Coal," *Canadian Journal of Chemical Engineering*, **70**, 751-758.

## **Refereed Conference Proceedings**

- [50] Younes A., Elkamel A., Areibi S., **Lohi A.**, 2009, "Evolutionary Algorithms: What, When and How?" Proceedings of the Third International Conference on Modeling, Simulation and Applied Optimization (ICMSA09), Sharjah, U.A.E. January 20-22, 2009.
- [51] Biglari M., Younes A., Elkamel A., **Lohi A.**, 2009, "Optimum Temperature for Crude Oil Desalting Operation," First International E-Conference on Artificial Intelligence Applications in Chemical Engineering (AIACE), July 9-10, 2009.
- [52] Silveston P. L., Hudgins, R. R., **Lohi A.**, Croiset E., Epling W. S., 2008, "An Extractive Reactor as the Key to a "Green" Process for Biogradable Detergents," proceedings of the 20<sup>th</sup> International Symposium on Chemical Reaction Engineering – Green Chemical Reaction Engineering for a Sustainable Future, ISCRE 20, Kyoto, Japan, September 2008.
- [53] Mahdi K., Zahedi G., **Lohi A.**, Gheshlaghi R., 2007, "Optimization of Kuwait Oil Refinery-Desalting Plant Using Design of Experiments," 2<sup>nd</sup> International Conference on Modeling, Simulation and Applied Optimization - ICMSAO' 07, The Petroleum Institute, Abu Dhabi, UAE.
- [54] Hanna J, Upreti S.R., **Lohi A.**, Ein-Mozaffari F., 2006, "Minimum Variance Tuning of PI Controllers Using Hybrid Genetic Algorithms," Mineral Process Modeling, Simulation and Control Conference Proceedings, T. Yalcin, and H. Shang (eds.), Laurentian University, Sudbury, 97-110.
- [55] Silveston P., **Lohi A.**, Hudgins R., Croiset E., 2006, "Sulfonation Employing Sulfur Dioxide Using Periodically Operated Extractive Reaction Based on Supercritical Carbon Dioxide with an Activated Carbon Catalyst," 5<sup>th</sup> International Conference on Unsteady-state Processes in Catalysis (USPC-5), Suita City, Japan.
- [56] Chatzis I., Fredrich K., **Lohi A.**, 2006, "Investigation of the Effect of Inert Gas on Production History of Heavy Oil Using VAPEX," Canadian International Petroleum Conference, 57<sup>th</sup> Annual Technical Meeting, Calgary, June 13-15, 2006 (paper 184).
- [57] Hanna J, Upreti S. R., **Lohi A.**, Ein-Mozaffari F., 2006, "Proportional-Integral (PI) Controller Tuning by Maximization of Normalized Harris Performance Index Using Hybrid Genetic Algorithm," Proceedings of the Mineral Process Modeling, Simulation and Control (MPMSC) Conference, Sudbury, Ontario, June 6-7, 2006.
- [58] Cuenca M. A., Vezuli J., **Lohi A.**, 2004, "Anaerobic Biodegradation of Diesel Fuel in GAC-AFB Reactor," Water & Wastewater Europe Conference, Barcelona, Spain, May 2004.
- [59] Zahedi G. A., Elkamel A., **Lohi A.**, Jahanmiri A., Rahimpour M. R., 2004, "Hybrid Model Formulation for the Unsteady State Simulation of a Packed Bed Reactor for CO<sub>2</sub> Hydrogenation to Methanol," The International Conference on Computational Methods, Singapore, December 15-17, 2004.
- [60] Cuenca M. A., Anania G., **Lohi A.**, 2004, "Biodegradation of Diesel Oil in a Three-Phase Fluidized Bed Bioreactor," Water & Wastewater Europe Conference, Barcelona, Spain, May 2004.
- [61] Cuenca M. A., Vezuli J., **Lohi A.**, 2004, "Anaerobic Degradation of Diesel Oil Contaminated Wastewater in a Fluidized Bed Reactor", 2<sup>nd</sup> International Environmental Congress, CONCARIBE 2004, Cartagena, Colombia, May 2004.
- [62] Cuenca M. A., Anania G., **Lohi A.**, 2004, "Aerobic Degradation of Diesel Oil Contaminated Wastewater using a Three-Phase Fluidized Bed Bioreactor," 2<sup>nd</sup> International Environmental Congress, CONCARIBE 2004, Cartagena, Colombia, May 2004.
- [63] Silveston P. L., **Lohi A.**, Hudgins R. R., Croiset E., Wattanakasemtham N., Rojanamatin S., 2004, "Production of Sulfuric Acid or Organic Sulfonates using a Cyclic Process with an Activated Carbon Catalyst and Supercritical Carbon Dioxide an Extractant," proceedings of the 16<sup>th</sup> International Congress of Chemical and Process Engineering, CHISA 2004, paper 1404, Prague, Czech Republic, August 2004 (Invited Paper).

- [64] **Lohi A.**, Silveston P. L., Hudgins R. R., Wattanakasemtham N., Panthaky M. A., Vladea R. V., 2002, "Progress in Utilization and Recovery of Dilute Sulfur Dioxide From Flue Gas," 1<sup>st</sup> International Environmental Congress of the Caribbean, May 22-24, 2002.
- [65] Rodriguez E. C., Cuenca M. A., **Lohi A.**, Otten L., 2002, "Nitrification and Denitrification in a Rotating Biological Contactor", 1<sup>st</sup> International Environmental Congress of the Caribbean, May 22-24, 2002.
- [66] Vladea R. V., Panthaky M. A., Duval K., **Lohi A.**, Hudgins R. R., Silveston P. L., 2001, "Low-Temperature, Carbon Catalyzed Oxidation of Sulfur Dioxide in the Presence of Water Vapor and a Solvent – A new Sulfuric Acid Process," 17<sup>th</sup> North American Catalysis Society Meeting, Toronto, June 3-8, 2001.
- [67] Chatzis I., Oduntan R., Smith J., **Lohi A.**, 2001, "Heavy Oil Recovery Using the VAPEX Process – Scale up Issues," Proceedings of the Canadian International Petroleum Conference, 52<sup>nd</sup> Annual Technical Meeting, Calgary, June 12-14, 2001, paper 127.
- [68] Easton J. W., **Lohi A.**, Doan H. D., 2001, "A Decade of Co-operative Education in Chemical Engineering at Ryerson University," 12<sup>th</sup> Canadian Conference on Engineering Education (C<sup>2</sup>E<sup>2</sup>), Victoria, August 23-25, 2001.
- [69] **Lohi A.**, Wynnyckyj J. R., Rhodes E., 1992, "A Method for Gas Temperature Measurement in a Three-Dimensional Rectangular Furnace: Convection Section of a Pulverized Coal-Fired Boiler," Intl. Conf. on Engineering Application of Mechanics, ICEAM-137, Tehran, 1992.
- [70] Marr R., **Lohi A.**, 1988, "Integrated Monitoring System for Control of Fouling in Coal-Fired Boilers," paper presented at American Flame Research Committee, Fall International Symposium, proceedings, Pittsburgh, 1988.
- [71] **Lohi A.**, Wynnyckyj J. R., Rhodes E., 1985, "Pyrometry for Measuring Gas and Ash Particle Temperatures in Coal-Fired Boilers," Proceedings of the Combustion Institute, Technical Meeting, proceedings TP-23, Waterloo, 1985.

### ***Papers Presented (or accepted) at National and International Conferences:***

- [1] Liu H., Biglari M., Elkamel A., **Lohi A.**, 2010, "Gasification-Pyrolysis of Biomass Using Fluidized and Circulating fluidized Bed," Conference of the Agriculture Biorefinery Innovation Network for Green Energy, Fuels and Chemicals (ABIN), March 2010, London, Ontario, Canada.
- [2] Muhamad H., Doan H. D., **Lohi A.**, 2009, "Batch and Fixed-Bed Column Biosorption of  $\text{Cd}^{2+}$  and  $\text{Cu}^{2+}$  onto Wheat Straw," 8<sup>th</sup> World Congress of Chemical Engineering, August 2009, Montreal, Quebec, Canada.
- [3] Muhamad H., Doan H. D., **Lohi A.**, 2008, "Adsorption of  $\text{Cd}^{2+}$  and  $\text{Cu}^{2+}$  on Wheat Straw Using a Batch System and a Continuous Fixed-bed Column," 58<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2008, Ottawa, Ontario, Canada.
- [4] Kundra P., Upreti S. R., **Lohi A.**, 2008, "Diffusion of Carbon Dioxide and Nitrogen in Polypropylene," 58<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2008, Ottawa, Ontario, Canada.
- [5] Imran M., Upreti S. R., **Lohi A.**, 2008, "Determination of Gas Dispersion in Vapor Extraction of Heavy Oil and Bitumen and Effect of Drainage Height in Vapex Process," 58<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2008, Ottawa, Ontario, Canada.
- [6] Abukhalifeh H., **Lohi A.**, Upreti S. R., 2008, "Determination of Concentration-Dependent Solvent Dispersion in Vapex," 58<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2008, Ottawa, ON, Canada.
- [7] Mahdi K., Zahedi G., Gheshlaghi R., **Lohi A.**, 2008, "Optimizing a Typical Crude Oil Desalting Plant by Experimental Design Approach," 5<sup>th</sup> International Chemical Engineering Congress, January 2008, Kish Island, Iran.
- [8] Zahedi G., Elkamel A., **Lohi A.**, 2008, "Dynamic Optimization of Methanol Reactor," 5<sup>th</sup> International Chemical Engineering Congress, January 2008, Kish Island, Iran.
- [9] Zahedi G., **Lohi A.**, Karami Z., 2008, "A Neural Network Approach for Identification and Modeling of Delayed Coking Plant," 5<sup>th</sup> International Chemical Engineering Congress, January 2008, Kish Island, Iran.
- [10] Dang V.B.H., Doan H.D., Dang-Vu T., **Lohi A.**, 2007, "Equilibrium and Kinetics of  $\text{Cd}^{2+}$  and  $\text{Cu}^{2+}$  Adsorption by Wheat Straw," 57<sup>th</sup> CSChE Conference, October 2007, Edmonton, Alberta, Canada.
- [11] Dang V.B.H., Doan H.D., **Lohi A.**, Dang-Vu T., 2007, "Adsorption of  $\text{Zn}^{2+}$  and  $\text{Ni}^{2+}$  in a Fixed Bed of Wheat Straw," 57<sup>th</sup> CSChE Conference, October 2007, Edmonton, Alberta, Canada.
- [12] Imran M., Upreti S. R., **Lohi A.**, 2007, "Potential strategies to Enhance Oil Recovery Using Vapex," 57<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2007, Edmonton, Alberta, Canada.
- [13] Tendulkar J., Upreti S. R., **Lohi A.**, 2007, "Determination of Gas Diffusivity in Polymers," 57<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2007, Edmonton, Alberta, Canada.
- [14] Tendulkar J., **Lohi A.**, Upreti S. R., 2006, "Optimal Control Determination of Ethylene Polymerization in a High-Pressure Tubular Reactor with Different Initiators," 56<sup>th</sup> CSChE Conference, October 15–18, Sherbrooke, Quebec, Canada.
- [15] El-Haj R., **Lohi A.**, Upreti S. R., 2006, "Experimental Determination of Solvent Gas Dispersion in Vapex," 56<sup>th</sup> CSChE Conference, October 15–18, Sherbrooke, Quebec, Canada.
- [16] Sundaram B. S., Upreti S. R., **Lohi A.**, 2005, "Optimal Control Determination of MMA Polymerization in a Nonisothermal Batch Reactor using Mono and Bifunctional Initiators," 55<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2005, Toronto, Ontario, Canada.

- [17] Dang-Vu T., **Lohi A.**, Doan H. D., 2005, "Mass Transfer Variation in a Packed Bed Column: A Mathematical Model," 55<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2005, Toronto, Ontario, Canada.
- [18] Kapadia R., Upreti S. R., **Lohi A.**, 2005, "Determination of Gas Dispersion and Solubility in Vapor Extraction of Heavy Oil and Bitumen," 55<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2005, Toronto, Ontario, Canada.
- [19] Elkamel A., Fatehifar E., Taheri M., **Lohi A.**, 2005, "Optimization of a Multi Pollutant Air Quality Monitoring Network Around a Network of Refinery Stacks," 55<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2005, Toronto, Ontario, Canada.
- [20] Zahedi G., Elkamel A., **Lohi A.**, 2005, "Dynamic Modeling and Optimization of Methanol Production from H<sub>2</sub>, CO, and CO<sub>2</sub> for an Industrial Reactor," 55<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2005, Toronto, Ontario, Canada.
- [21] Upreti S. R., Kapadia R., **Lohi A.**, Chatzis A., 2005, "Gas Dispersion in Vapor Extraction of Heavy Oils and Bitumen", Indian Chemical Engineering Congress, CHEMCON 2005, December 2005, New Delhi, India.
- [22] Zahedi G. R., Elkamel A., **Lohi A.**, Jahanmiri A., Rahimpour M.R., 2005, "Optimum Operation of an Industrial Methanol Reactor using an Optimal Control Policy and Application of Two Control Variables Simultaneously," Kuwait 1<sup>st</sup> International Petrochemical Conference, December 12-14, 2005, Kuwait.
- [23] Cuenca M. A., Vezuli J., **Lohi A.**, 2005, "Anaerobic Biodegradation of Diesel Fuel in GAC-AFB Reactor," 55<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2005, Toronto, Ontario, Canada.
- [24] Cuenca M. A., Anania G., **Lohi A.**, 2005, "Biodegradation of Diesel Oil in a Three-Phase Fluidized Bed Bioreactor," 55<sup>th</sup> Canadian Society of Chemical Engineering Conference, October 2005, Toronto, Ontario, Canada.
- [25] Zhu Y., Doan H. D., **Lohi A.**, 2004, Liquid Distribution and Its Effect on Local Mass Transfer in A Packed Column of Pall Rings, paper presented at The 54<sup>th</sup> CScE Conference, October 3-6, 2004, Calgary, Alberta, Canada.
- [26] Khan A., Doan H. D., **Lohi A.**, 2003, "Biological Treatment of Wastewater Containing Automotive Antifreeze Solution using a Packed Column," 53<sup>rd</sup> Canadian Chemical Engineering Conference, October 2003, Hamilton, Ontario, Canada.
- [27] Yao F. Z., Dhib R., **Lohi A.**, 2003, "A Kinetic Model of Ethylene Polymerization in High-Pressure Tubular Reactor," 53<sup>rd</sup> Canadian Chemical Engineering Conference, October 2003, Hamilton, Ontario, Canada.
- [28] Wattanakasemtham N., **Lohi A.**, Hudgins R. R., Silveston P. L., Croiset E. B., 2003, "Sulphur Dioxide Scrubbing and Sulphuric Acid Production from Flue Gas," 53<sup>rd</sup> Canadian Chemical Engineering Conference, October 2003, Hamilton, Ontario, Canada.
- [29] Doan H. D., **Lohi A.**, Lam C., 2002, "Removal of BOD in Wastewater from a Polymer Coating Process Using a Cyclic Aeration in a Packed Column," 52<sup>nd</sup> Canadian Chemical Engineering Conference, October 2002, Vancouver, British Columbia, Canada.
- [30] Doan H. D., **Lohi A.**, Condos T., 2001, "Effect of Liquid Viscosity on the Mass Transfer Coefficient in a Packed Column," 51<sup>st</sup> Canadian Chemical Engineering Conference, October 2001, Halifax, Nova Scotia, Canada.
- [31] Gostick J., Doan H. D., **Lohi A.**, Pritzker M. D., 2001, "Measurement of Local Mass Transfer Coefficients in a Packed Column of Pall Rings Using a Limited Current Technique," 51<sup>st</sup> Canadian Chemical Engineering Conference, October 2001, Halifax, Nova Scotia, Canada.
- [32] Alvarez Cuenca M., Castilla Rodriguez E., Otten L., **Lohi A.**, 2001, "Oxygen Mass Transfer in a Rotating Biological Contactor" 51<sup>st</sup> Canadian Chemical Engineering Conference, October 2001, Halifax, Nova Scotia, Canada.

- [33] Gostick J., Doan H. D., **Lohi A.**, Pritzker M. D., 2003, "Local Mass Transfer Coefficient and A Mass Transfer Model for a Packed Bed," Advances in Petrochemicals and Polymers in the New Millennium, July 22-25, 2003, Bangkok.
- [34] **Lohi A.**, Wynnyckyj J. R., Rhodes E., 1999, "Pyrometric Measurement of Gas Temperature in a Pulverized Coal-Fired Utility Scale Boiler," 49th Canadian Chemical Engineering Conference, October 1999, Saskatoon, Saskatchewan, Canada.
- [35] **Lohi A.**, 1991, "Ring Formation in Rotary Lime and Cement Kilns, in Annual Conference of the Association of the Cement Manufacturers," Tehran, June 1991.
- [36] **Lohi A.**, 1990, "Physical-Chemical Studies on Ring Formation in Rotary Cement Kilns, First Annual Review Meeting on Mechanisms of Ring Formation in Lime Kilns," University of Toronto, Toronto, 1990.
- [37] **Lohi A.**, Marr R., 1988, "Application of Pyrometric Measurement of Gas Temperature to the Chemical Recovery Boiler," presented at the Pulp and Paper Institute of Canada (PUPRICAN) meeting, proceedings, Vancouver, 1988.